THE COUNTY OF THE SOIL AND WATER CONSERVATION DISTRICT

District Completes Stream Data Collecting

Soil and Water District employees have worked with the St. Charles County Development Review Division collecting data in county streams to assess water quality, aquatic life and stream bank stability. The county uses the data to determine stream health and to pinpoint areas where pollution is threatening water resources. Much of the data was collected along streams and drainage ways where development has recently taken place. Current county ordinances require 50 foot riparian setbacks along those streams, and monitor and regulate storm runoff on new construction. Data will be collected again in 3 to 5 years and compared to the 2011-2012 findings. Pictured below is Charlie Perkins, SWCD Technician, as he reads the water temperature which is just one of the elements recorded in determining the health of a stream.



Wentzville Uses Grant for Watershed Initiative

The City of Wentzville was awarded \$748,015 to support the non-point source prevention initiative called the Dry Branch Watershed: Clear Stormwater and Green Parks Project. Funding has been provided in part by US EPA Region 7 through the Missouri Department of Natural Resources under the Clean Water Act. The city matched \$500,000, which brings the total for the project to \$1,248,015.

With the development of a Watershed Plan, the city will address issues relating to nonpoint source (NPS) water pollution such as oil, trash, fertilizer and other contaminants that stormwater picks up on its route to drainage ways. Because NPS pollution comes from a variety of sources over a wide area, preventing it from entering waterways is shellenging

it from entering waterways is challenging.

The Watershed Management Plan calls for the installation of green infrastructure at Heartland Park, including pervious pavement, athletic field biofilters, a native meadow, and parking lot bioswales. Additionally, existing infrastructure at the Law Enforcement Center will be retrofitted, as will structures at two commercial properties and one residential subdivision. Another feature will trap mud and trash from runoff from 500 acres of development along 1-70 and Wentzville Parkway.

The SWCD is one of many stakeholders on the project, providing input and guided development of the watershed plan.



68th Annual Cooperators' Meeting Held



The SWCD marked 68 years of service in St. Charles County with the Annual Cooperators' Meeting November 15, at the University of Missouri Extension Center in St. Peters. Over 120 farmers and landowners enjoyed a buffetstyle Thanksgiving dinner, and learned more about SWCD and NRCS programs.

The featured speaker was Judith Blanton, local historian and storyteller. Judith brought a collection of old photos from the county and spoke to the group about the joy of pursuing one's own genealogy.



Sam Harris, left, accepts the Cooperator of the Year Award from Board Chairman Mark Scott.

Each year, the SWCD Board chooses a farmer to award the Cooperator of the Year. This year's recipient was Sam Harris, a livestock and grain farmer in Wentzville, who recently discovered the efficiency of a prescribed grazing system and shared his success story with the audience. Sam was awarded a plaque of appreciation for his work with the district and NRCS in installing soil and water conservation practices on his farm. Besides the prescribed grazing system, Sam has also converted cropland to pastureland by planting cool season grass and inter-seeding legumes.

The 2012 Urban Conservationist award was presented to Frank Godwin, Stormwater Manager for the city of Weldon Spring. Godwin works diligently to inform and educate citizens about the damaging effects of stormwater runoff which include the loss of productive soil and the consequent flooding and polluting of area streams. He also enforces the municipal stormwater regulations in an effort to preserve and enhance clean water resources in the area. Weldon Spring is the only municipality in St. Charles County that has zoning and subdivision regulations promoting "conservation development" intended to conserve natural areas and create interconnected networks of open space.

A special thank you was extended to Betty Ehlmann, longtime friend of the district and the wife of past Board Chairman, Gene Ehlmann. Betty was awarded a plaque of appreciation for the volunteer time she gave to the SWCD office over the past 30+ years. The SWCD, NRCS and FSA staffs will miss her kind and cheery presence in the office.

Also on hand to speak to landowners were Steve Spezia, Land Specialist with Ducks Unlimited; Connie Gibson, County Executive Director for FSA; Renee Cook, District Conservationist with NRCS; and Jeff Esley, Private Lands Conservationist with MDC.

See MEETING, pg. 3

Improve Soil Health and Increase Yields

With the pressure farmers feel to feed the world and the need to utilize every acre, it is no wonder that scientists have begun to realize we must make our natural resources go further. Natural resources are quickly depleted when societies follow "old world thinking" - where the answer to producing more agronomic products was putting on more fertilizer and irrigating more heavily.

There is now a growing movement world-wide to improve 'Soil Health' and reduce inputs while increasing yields and making soils self-supporting. An initial step in improving soil health is addressing soil erosion. Soil erosion is caused by water that has not infiltrated into the soil profile and runs downhill upon impact. Many people don't understand this process and still think that soil has to be tilled for water to infiltrate. It is not the slope and rainfall intensity that cause erosion but improper farming techniques that are responsible. The water that runs off not only carries away soil particles and nutrients but also does not infiltrate the soil to provide much needed moisture for cash crops. The use of No-till and cover crops keeps moisture and nutrients in the field where they are needed, and prevents loss of soil particles to rivers and streams.

Even those farmers who cannot afford to purchase no-till equipment can still make a large impact on their soil health by incorporating cover crops into their regular cash crop rotation. Cover crops can consist of a simple crop of wheat that you kill before you plant your spring crop or it can be as complicated as a mixture of 6 or 7 different types of plants that all provide something different to improve your biological and tilth quality.

If you are interested in learning more about the use of cover crops in your rotation, call or visit the nearest Natural Resources Conservation Service office and learn how you can improve your `Soil Health'. If you are interested, call the NRCS at 636-922-2833, ext. 3. Funding may be available.

Shawn Keller, NRCS

Navigating the Web and Finding Useful Ag-related Resources

More and more farmers and landowners are accessing the agricultural tools and websites available



on the internet, but it has definitely involved a learning curve for many of us born in the era when phones were attached to the wall and the web was something you knocked out of the corner of the room with a broom. If all that "tweeting" and "liking" and "pinning" has got you befuddled...don't feel bad. This writer was born in the middle 1960s, and even I have to con-

sult my teenage daughters on topics that involve my Smart phone and my Facebook page.

There is so much cyber information flying around out there that it is quite likely that you've been lost somewhere on the web at one time or another. Maybe your grandson tweeted about your birthday, or your daughter pinned her favorite recipe, or your neighbor commented on a recent blog connected to the USDA site.

Businesses and organizations have taken advantage of the speed and efficiency of the internet to provide information to the people they serve. This includes a baffling amount of agriculture-related content, including up-to-the-minute weather and market reports, crop reports, research updates, tips and advice on all sorts of ag topics. State and federal agencies, and the farmers and landowners themselves have posted or published information on every topic that may interest a producer or a consumer. This is not in reference only to websites, but also to the massive social networking appendages of the web.

So how do you navigate the cyber highway? How do you find out which pest is eating your corn, or which cover crop is best, or where can you sell locally, or what's the progress (or not) of the Farm Bill?

It's simple, really. You start with a "search engine" such as Google or Bing, and you type key words in to the search bar, that long thin rectangular box that sometimes has a little magnifying glass at the end. You may type in that box: "corn pest Missouri", for example, and the result should be a list of websites that offer information with those key words. I did that search, and the University of Missouri Extension website is one of the top offerings, and actually I often skip the search engine and just go straight to Extension for most of my personal ag questions. If they don't have the answer, they'll have a link to someplace that does.

Most of your larger state and federal agencies also now participate in the social networking sites. For example, the Missouri Corn Growers and Missouri Cattlemen have Facebooks; and the Missouri Department of Agriculture and the Governor's office share photos on Flickr. Even NRCS is taking advantage of YouTube: just type in the search bar, "Soil Health" and view some informative videos.

Chances are if you are a farmer who is 40 or younger, you know what you're doing when you log on to seek information, but for some of you more seasoned folks, we are providing a few basic definitions and explanations to help you understand the different offerings, as well as some links to some valuable agriculture-related websites.

If you have any questions or need more assistance, please don't call our office. We recommend contacting a 10 year old!

<u>Definitions</u>:

The Internet: A massive network connecting millions of computers across the world and allowing communication between all those computers.

The Web: An information-sharing model that uses the internet and allows the sharing of text, graphics, sound and video.

Social Networking Sites: Basically they are online communities. These web-based spaces allow users to set up profiles and then link to other people's profiles, allowing them to share endless amounts of data including images, music, emails, conversations, videos and more.

Facebook: A social networking site that allows the user to have their own "page" and post just about anything they want for their "friends" to see. "Friends" is in quotes because I know my daughter does not have over 900 friends in the non-cyber world,

but on Facebook, a friend is anyone that you allow to see and interact with your page.

Twitter: Have your kids or grandkids been tweeting? That just means that they are announcing things on their Twitter site. People "tweet" about whatever is important to them, and if enough other people find it to be interesting or informative, you could have a lot of followers on your Twitter page. For example: A famous movie star might have thousands of followers (that's how we find out how upset Ashton Kutcher is with Demi Moore), or your grandchild may have a dozen or so other kids who want to know what color shoes she's wearing today — so they follow her Twitter feed.

Flickr: A photo sharing site that allows the user to set-up a profile and upload digital photos. There are other photo-sharing sites, but they all have the same purpose—to store and share your digital memories. Years ago, we would develop our rolls of film and then make doubles for family members. Now the photographer can upload the photos to the photo-sharing site, distribute the link to family and friends, and allow endless numbers of people to see and/or copy the photos. It's a gigantic "photo album" online. A recent MoGov Flickr post featured Cameron Cave in Hannibal. Mo.

Pinterest: A cyber bulletin board. Users set up virtual bulletin boards and then "pin" articles, photos, recipes, etc.. Each user makes themed boards of their choice and reflecting their personal interests. It's a way to organize and preserve all those things that, in the old days, you may have clipped out of magazines. You might have a board with recipes, or one with craft projects you'd like to try, and another with photos of places you'd like to visit. You can store links to all your favorite things on one site.

YouTube: This is a fun and addicting destination on the web. Be careful what you type into the search bar because there is all kinds of questionable content here, but don't let that scare you. Well-known, legitimate organizations broadcast useful information on all sorts of topics. YouTube is the "broadcast yourself" site. Anyone can upload a video to share with the world. This is the site that brought us Justin Bieber (its ok if you don't know who that is) and has launched the careers of singers, reality television "stars", musicians and comedians. Type in "farming" and you will find various farming-related videos....including some song parodies produced by three farming teenage brothers (funny!).

Many governmental, agricultural and conservation-related agencies utilize the above-mentioned social media sites. For example, the United States Fish and Wildlife Service has a Flickr page, as does the USDA and our own local SWCD. Many agencies also have Facebook and Twitter pages. The computersavvy farmer will also know that all the related ag and natural resource agencies have websites which are loaded with useful information: everything from market reports and scientific research to features about Missouri farm families and their personal experiences. You can learn where to sell your products; how to better manage the business side of your operation; what conservation practices are best for your farm; how to identify weeds; where to purchase farm equipment.....The list of helpful resources is endless.

A few Missouri Ag and Natural Resource sites:
(just type these into a search engine box)
Missouri Department of Agriculture

University of Missouri Extension
Missouri Corn Growers Association
Missouri Department of Conservation
AgMachine.com Agriculture.com
USDA.gov Mofb.org
FSA.usda.gov Missouri NRCS
Mo-Ag Missouri Farmer Today
Rural Missourian AgriMissouri.com
USDA—ERS

This is by no means a complete list.

Be sure to check out the District's website at www.swcd.mo.gov/stcharles/ and the Flickr at www.flickr.com/photos/swcd

The soil and water conservation district does not endorse nor recommend any of the vendors/contractors advertised in this newsletter, furthermore, any contractor/vendor that wishes to be added to the district's contractor/vendor list can be added upon request.

Mark These Dates



Prescribed Burn Workshop Planned

The Missouri Department of Conservation will host a prescribed burn workshop for area landowners at the Lincoln County Health Department in Troy on Tuesday, **March 12**, from 6:30 to 9:00 p.m. The course will be taught by MDC certified burners, and participants will learn about the value and purpose of prescribed fires as a land management tool. Attendees will also receive instruction on how to safely and effectively plan and conduct a controlled burn. Seating is limited, so please call the Lincoln County SWCD office at 636-528-4877, ext. 3, to reserve your spot.

Grazing Conference will Feature Teddy Gentry of the Band, Alabama

A keynote speaker for the **February 28** Mid-Missouri Grazing Conference will be Teddy Gentry of the legendary country music band Alabama. Gentry will share some of his conservation farming experiences with Bent Tree Farms where he has implemented a grazing system, a breeding system and composite breed development.

The Central Missouri Producer Panel will also be featured with their discussion of managing a grazing system during the 2012 drought, and what they will change for 2013.

The all day event will begin with a trade show and commence with break-out sessions with varied topics including Pasture Renovation, Native Grasses 101, Genetics for Feed Efficiency, Alternative Forages and Cover Crops

Location is the Capital Plaza Hotel, 415 W. McCarty, Jefferson City; and advanced registration is due by February 22, with a cost of \$50 for an individual and \$85 for a couple. Registration includes a meal, refreshments and all proceedings. For more information or to register, call Ed Gilmore or Peggy Lemons at 573-893-5188, ext. 3.



Farmland Prices at Record Highs

According to a survey by the University of Missouri, farmland prices were at record high levels in July 2012. The survey is conducted by the Department of Agriculture's National Agricultural Statistics Service and the USDA. The estimates are used to administer USDA programs such as the Conservation Reserve Program and in decision-making by other lenders, landowners and tenants.

These higher land values and concurrent high commodity prices drive up cash rent per acre amounts.

About 240,000 farms and ranches in the United States are contacted to provide information for the survey. According to the survey, cash rent for all Missouri cropland increased by \$5 per acre to \$110 in 2012. Irrigated cropland saw the highest increase, rising from \$148 per acre in 2011 to \$164 per acre in 2012.

Meeting, from pg. 1

SWCD Board Chairman, Mark Scott, acted as emcee and awarded the plaques to Sam Harris and Frank Godwin; and received assistance from Campbell Eckhardt in drawing names for the door prizes. Campbell is the son of Perry Eckhardt, regional Urban Forester.

Frankie Coleman, District Manager, thanked the farmers for their dedication to conservation farming, and spoke about the availability of cost-share funds in the coming year. Any landowner interested in addressing an erosion problem on their land is encouraged to contact the district to establish a plan for future work. Frankie also thanked the board and staff members for their dedication to getting conservation practices on the ground in St. Charles County.

Thanks are extended to John Grillo of Main Street Diner for catering the event.

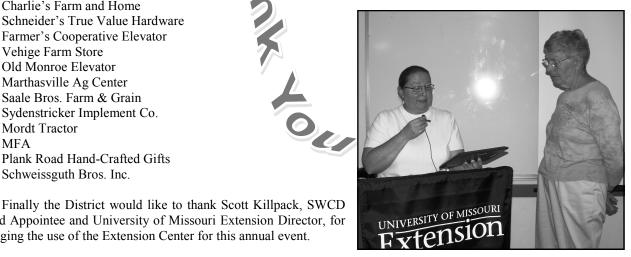
We also greatly appreciate the generosity of all individuals and businesses who donated a door prize for the evening:

Straatmann Farm Service Main Street Diner Charlie Perkins and Jo Leah Robertson Wm. Nobbe & Co. Inc. Leonhard Insurance Charlie's Farm and Home Schneider's True Value Hardware Farmer's Cooperative Elevator Vehige Farm Store Old Monroe Elevator Marthasville Ag Center Saale Bros. Farm & Grain Sydenstricker Implement Co. Mordt Tractor **MFA** Plank Road Hand-Crafted Gifts Schweissguth Bros. Inc.





Frank Godwin (above, right) accepts the Urban Conservationist Award from Board Chairman Mark Scott. Below, Betty Ehlmann (at right) was surprised to be called up to the podium by District Manager Frankie Coleman, who presented Betty with a plaque of appreciation for service to the District.



Board Appointee and University of Missouri Extension Director, for arranging the use of the Extension Center for this annual event.

Fineness of Grind is Important in Liming Materials

Farmers know lime is the answer to acidic soil, but consideration of the particle size of lime is an important step in purchasing the material for the field. While the measure of calcium carbonate in the limestone is necessary to know, the fineness of grind will contribute to the rate of reaction of the liming material when placed in acidic soil.

There are laws regulating the calcium carbonate equivalent (CCE) for agricultural lime, and in Missouri that law specifies a minimum CCE of 65%. Particle size is also included in the lime law to indicate the potential reactivity of the limestone. A minimum of 90% of the particles passing the 8-mesh sieve is required for the material to be sold as agricultural limestone.

According to research by J.R. Brown, Emeritus Professor of Soil Fertility at the University of Missouri, particle size and solubility determine the rate of reaction of liming materials when placed in acid soil.

Small particle sizes are most effective in neutralizing soil acidity because, the finer the par-

the more surface area exposed per weight of material. For example, if one has a 1'x 1'x 1' solid cube of liming material it would have 864 sq. in. of surface area (6 sides times 144 sq. in. per side).

Cutting that cube into 8 solid cubes, each $.5 \times .5 \times .5$ piece doubles the exposed surface area of the material.

Finer particles expose more surface area per given weight of limestone.

Surface area is important because dissolution of sparingly soluble materials occurs from the particle surface inward, and the solution product of liming materials will move away from the liming material particle only a small distance regardless of size of particle (Stevens 1990). Thus, to counteract reserve soil acidity many small particles in a volume of soil will be more effective than a few larger particles of the same weight per unit of soil.

There are some negatives involved in obtaining finer grind. First, many quarry operators treat agricultural limestone as a sideline product, being more inclined to quarry an aggregate size for which there is a market outside agriculture, and second the added grinding adds cost to the product. Transporting and spreading finer material can also be a challenge because the dry, fine material is easily moved by wind and may blow onto roadways near the field.

Liming will remain an important step in many agricultural processes because crop production is acidifying and will accelerate soil's natural tendency to become acidic in humid regions. Good liming practices are based upon proper weighting of both fine and coarser limestone particles to prevent both under and over liming soils.

If you have questions about using lime, call the district at 636-922-2833, ext. 3

SWCD Board Reorganized

Supervisor elections were conducted at the Annual Meeting November 15, with Don Johnson and Paul Kamphoefner reelected for another term. At the December board meeting, the board was reorganized, resulting with Don Johnson taking over as SWCD Board Chairman. Other positions are as follows: Mark Scott, treasurer; Paul Kamphoefner, vice-chairman; Alan Poggemoeller, member; and Scott Killpack, secretary.

Financial Assistance -

Are you considering one of the following practices?

Eligible agricultural landowners/operators can take advantage of Environmental Quality Incentive Program (EQIP) or Wildlife Habitat Incentive Program (WHIP) funding that may be available for the following practices on:

Cropland

Nutrient Management (fertilizer budgeting), Integrated Pest Management, Cover Crop, Residue Management (No-till/Strip-till), Seasonal High Tunnel for Vegetables Production (steelframed, polyethylene-covered structures that extend the growing season)

Pasture and Hay Land

Grazing Systems (fence, pipeline, watering tanks, spring developments, stream crossing, brush management, water well), Nutrient Management (fertilizer budgeting), Integrated Pest Management (herbaceous species control/ suppression), Interseeding Legumes, Cool Season or Warm Season Grass Renovation, Prescribed Burning.

Woodland

Woodland Plan Development, Forest Stand Improvement, Tree/Shrub Site Preparation and Establishment, Forest Trails and Landings, Livestock Exclusion from Woodlands (fencing), Prescribed Burning.

Wildlife Land

Perennial Food Plot (green browse), Woody Cover Control, Edgefeathering, Permanent Forest Openings, Downed Tree Structure, Cool Season or Warm Season Grasses &/or Legume and Forb Establishment, Prescribed Burning, Wildlife Watering Facility.

Funding may also be available on

Waste Storage Facilities, Waste Facility Cover, Waste Treatment Lagoons, Anaerobic Digester, Waste Transfer, Animal Mortality Facility, Closure of Waste Impoundments, Solid/Liquid Waste Separation Facility, Pumping Plant, Irrigation, Well Decommissioning, Agricultural Energy Management Plan (AgEMP), Comprehensive Nutrient Management Plan and more.

Missouri's first EQIP evaluation period for Fiscal Year (FY) 2013 will end on Friday, January 18, 2013. FY13 EQIP applications submitted after January 18, 2013, will be held for potential funding under any additional FY13 EQIP evaluation period, or until allocated FY13 EQIP funds are fully obligated in contracts.

Contact NRCS at 636-922-2833 Ext. 3 for further information or to schedule an appointment for an EQIP or WHIP eligibility determination.

Hispanic and Women Farmers Claiming Discrimination Must File by March 25

The USDA has announced that all women and Hispanic farmers who believe the USDA has improperly denied them farm loan benefits between 1981 and 2000 because they are Hispanic or female, may be eligible for compensation. If you think you may be eligible, call 1-888-508-4429 to learn how to file a claim.



Reporter Soil and Water Conservation District

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160 St. Peters Centre Boulevard St. Peters, MO 63376-1695

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Missouri Gears Up for Another Envirothon Competition

Funds being raised for Scholarship

Following a competition year where Missouri took first place in the national event, the St. Louis chapter of the organization is underway with training for students who will participate in the regional event. Local schools send teams to the April competition where it will be decided which three teams will move on to the Missouri Envirothon in May. Scholarships and other prizes are available at the national level which takes place this year in Montana. The current issue topic this year is Sustainable Rangeland Management.

Missouri also has a scholarship available to Envirothon students who have participated at any level. The Mary S. Burt Envirothon Scholarship is offered to those students who plan to

Mary Burt with students in the 1980s. Mary especially enjoyed sharing her knowledge of soil with children.

attend college pursuing a natural resource or agriculture related career. This scholarship is named for Mary Burt, past district manager of the St. Charles County SWCD. In order to raise funds to support this scholarship program, the Missouri Envirothon is holding a gun raffle. Tickets were sold at the Annual Meeting and at the SWCD Training Conference, and will be available through February. Tickets are \$2 and are for a chance on a Remington 870 Express 12 Gauge Pump Action Shotgun with a 3.5" chamber. All proceeds will go to the Mary S. Burt Envirothon Scholarship Fund which annually awards a \$250 scholarship to an Envirothon student. As funds increase, the committee hopes to increase the amount of the scholarship.

If you have any questions or would like to participate, call Theresa at 636-922-2833, ext. 3. The drawing will be held during the March meeting of the St. Charles County SWCD Board.



MDC Urban Forester Mark Grueber provide d forestry training to high school students en rolled in the Envirothon program during a weekend training program at the Dana Brown Overnight Center of the Shaw Nature Preserve.

Mark is one of many natural resource professionals who give their time to the Envirothon program.

St. Charles County Soil & Water Conservation District 160 St. Peters Centre Boulevard St. Peters, MO 63376-1695

636-922-2833, ext. 3 Board of Supervisors

Don Johnson, Chairman • Paul Kamphoefner, Vice-Chairman Scott Killpack, Secretary • Mark Scott, Treasurer Alan Poggemoeller, Board Member

District Personnel

Frankie Coleman, District Manager Charlie Perkins, District Technician Theresa Dunlap, Info-Ed Specialist

NRCS Personnel

Renee Cook, District Conservationist Shawn Keller, Soil Conservationist Curtis Hoeft, Soil Conservationist Kervin Bryant, Soil Conservationist Deb Frazier, ACES

The mission of the Soil & Water Conservation District is to conserve the soil and water resources of the county; promote the wise use of these resources through education; protect residents from undue hardship caused by erosion, sedimentation and flooding; protect the agricultural soil base to ensure continued productivity; and preserve the quality of water and water courses within the county.

Highly Erodible Land and Wetland Compliance

Landowners and operators are reminded that in order to receive payments form USDA, compliance with Highly Erodible Land (HEL) and Wetland Conservation (WC) provisions are required.

Violations of the so-called "Sodbuster" and "Swampbuster" Acts of the 1985 Farm Bill can result in **loss and/or required prepayment of ALL farm program benefits** now and in the future until the land is restored to its previous state as determined by USDA.

It is of the utmost importance that producers notify either FSA or NRCS <u>prior</u> to clearing bottomland woods, manipulating wetlands, clearing fence rows and/or converting to cropland any pasture or hay land not previously cropped. When planning this type of work, the producer will need to complete form AD-1026 and request an official determination.